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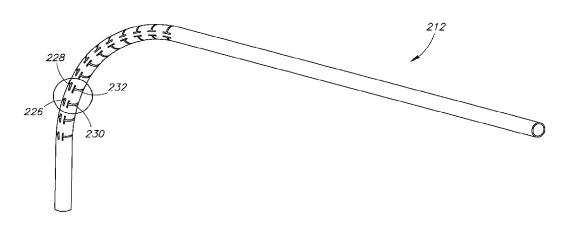
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13 September 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CANNULA FOR INJECTING MATERIAL INTO BONE



(57) Abstract: A bone cement cannula, the cannula comprising: a tube (212) including a section (224) for plastic deformation; and a lumen in the tube capable of resisting forces of a viscous material propelled therethrough at a pressure of at least 100 atmospheres. Alternatively a bone cement cannula (1002) with at least two inlet ports (730), (740) for a plurality of materials or entry of a stylet.





### INTERNATIONAL SEARCH REPORT

International application No PCT/IB2006/053014

| A. CLASS<br>INV.  | IFICATION OF SUBJECT MATTER<br>A61B17/34   | ·  |   |
|---|--|--|---|
| According t   | o International Patent Classification (IPC) or to both national clas   | ssification and IPC  |   |
|   | SEARCHED   |  |   |
|   | ocumentation searched (classification system followed by classi A61F   | fication symbols)  |   |
| Documenta   | ttion searched other than minimum documentation to the extent t  | that such documents are incl   | uded in the fields searched   |
| Electronic o  | data base consulted during the international search (name of da  | ta base and, where practica  | I, search terms used)   |
| EPO-In  | ternal   |  |   |
| C. DOCUM  | ENTS CONSIDERED TO BE RELEVANT   |  |   |
| Category*   | Citation of document, with indication, where appropriate, of the   | ne relevant passages   | Relevant to claim No.   |
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|   |  | -/   | 19  |
| X Furt  | f  | X See patent far   | nily annex.   |
| "A" docume consider filling of the color of | ent defining the general state of the art which is not lered to be of particular relevance document but published on or after the international date ent which may throw doubts on priority claim(s) or is cited to establish the publication date of another n or other special reason (as specified) ent referring to an oral disclosure, use, exhibition or means ent published prior to the international filing date but than the priority date claimed | or priority date an cited to understan invention  "X" document of partic cannot be conside involve an invention  "Y" document of partic cannot be conside document is combined to the consideration of | olished after the international filing date d not in conflict with the application but id the principle or theory underlying the ular relevance; the claimed invention ered novel or cannot be considered to we step when the document is taken alone ular relevance; the claimed invention ered to involve an inventive step when the olined with one or more other such docupoination being obvious to a person skilled of the same patent family |
| Date of the   | actual completion of the international search  | Date of mailing of t   | he international search report  |
| 2   | 0 March 2007   | 05/06/2  | 007   |
| Name and r  | mailing address of the ISA/  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  Fax: (+31-70) 340-3016   | Authorized officer   | hilip   |

# INTERNATIONAL SEARCH REPORT

International application No
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| C(Continua | tion). DOCUMENTS CONSIDERED TO BE RELEVANT  |                          |
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## International application No. PCT/IB2006/053014

### INTERNATIONAL SEARCH REPORT

| Box II                                       | Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)   |
|--|---|
| This Inte                                    | rnational Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:   |
| 1. X   | Claims Nos.: 20-21 because they relate to subject matter not required to be searched by this Authority, namely:   |
|  | Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery   |
|  | Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  |
| <u>.                                    </u> | Claims Nos.:<br>because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).   |
| Box III                                      | Observations where unity of invention is lacking (Continuation of item 3 of first sheet)  |
| This Inte                                    | rnational Searching Authority found multiple inventions in this international application, as follows:  |
|  | see additional sheet  |
|  |   |
| 1.   | As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.  |
| 2.   | As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.  |
| 3.   | As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:                        |
| 4. X   | No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  See annex |
| Remark                                       | on Protest  The additional search fees were accompanied by the applicant's protest.  No protest accompanied the payment of additional search fees.  |
|  |   |

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-13,19

Deformable cannula, with a series of joints or a sleeve or sealing layer

2. claims: 14-18

Cannula with multiple inlet ports

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/IB2006/053014

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